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CLAIMS

1. A process for vacuum die casting for the production of high-quality cast parts made of metals and/or their alloys, with a mold cavity (5) and a casting chamber (6, 6'), as well as an injection channel of a die casting mold (1), being evacuated in a controlled way by means of a device for generation of partial vacuum and an isolation valve (16), characterized in that the mold cavity (5) to be filled is first released when it has been degassed, and the casting chamber (6, 6') is closed until this time and is 100 % prefilled with metal melt.
2. A process according to claim 1, characterized in that the mold cavity (5) is evacuated while the casting chamber (6, 6') is being filled.
3. A process according to claim 1 or 2, characterized in that an opening of the casting chamber (6, 6') is closed by a valve (11).
4. A die casting mold, particularly a vacuum die casting mold (1) for the production of cast parts from metals and/or their alloys, having a device (16) for evacuation of the mold cavity (5) and the casting chamber (6, 6'), particularly for performing the process according to claim 1, characterized in that an opening on the face of the casting chamber (6, 6') which lies opposite to the casting plunger (7), can be closed by a valve (11).
5. A die casting mold according to claim 4, characterized in that the valve (11) is

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- 2 -

hydraulically controlled and provided with a seal (14).

6. A die casting mold according to claim 4 or 5, characterized in that the valve (11) is connected via a plunger rod (12) with a hydraulic element (13) in such a way that their temperatures are separate.

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